



PTO/SB/21 (08-03)

Approved for use through 07/31/2006. OMB 0651-0 031

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# TRANSMITTAL FORM

(To be used for all correspondence  
after initial filing)

Application Number	10/788,606
Filing Date	February 27, 2004
First Named Inventor	Mary E. Brunkow
Group Art Unit	1644
Examiner Name	Patrick Nolan
Attorney Docket No.	60117-109

## ENCLOSURES (check all that apply)

- |   |  |   |
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| <input type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><input type="checkbox"/> Amendment/Response<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input checked="" type="checkbox"/> Information Disclosure Statement; Form PTO-1449<br><input checked="" type="checkbox"/> Cited References<br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Response to Missing Parts under 37 C.F.R. 1.52 or 1.53<br><input type="checkbox"/> Response to Missing Parts/Incomplete Application | <input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Request for Corrected Filing Receipt<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation, Change of Correspondence Address<br><input type="checkbox"/> Declaration<br><input type="checkbox"/> Statement under 37 CFR 3.73(b)<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Small Entity Statement<br><input type="checkbox"/> Request for Refund | <input type="checkbox"/> CD(s), Number of CD(s)<br><input type="checkbox"/> After Allowance Communication to Group<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Return Receipt Postcard<br>Additional Enclosure(s) (please identify below):<br><hr/> <hr/> <hr/> <hr/> |
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## Remarks

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Individual Name	Jane E. R. Potter, Registration No. 33,332	22504
Signature		
Date	November 11, 2004	

## CERTIFICATE OF FACSIMILE TRANSMISSION/MAILING

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This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



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Nov. 11th, 2004  
Date

by Jessica Brant  
Signature

Jessica Brant  
Printed Name

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Mary E. Brunkow et al.

Application No.: 10/788,606

Filing Date: February 27, 2004

For: ANTIBODIES ASSOCIATED WITH ALTERATIONS IN BONE DENSITY

Art Unit: 1644

Docket No.: 60117-109

Date: November 11, 2004

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

### SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to the requirements in 37 C.F.R. § 1.56, and in conformance with 37 C.F.R. 1.97 and 1.98, Applicant hereby submits a Supplemental Information Disclosure Statement.

Applicant respectfully requests that the Examiner: (1) consider the following documents during the course of his or her examination of the above-identified patent application, and (2) list the following documents in the References Cited section of any patent that may issue from the above-identified patent application.

Applicant cites 25 references listed on the attached substitute for form PTO-1449. The order of these references should not be construed to suggest their relative pertinence. The

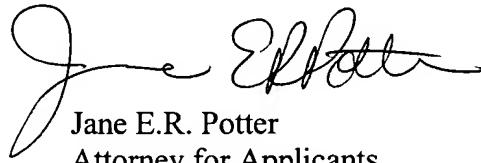
Examiner is encouraged to review the entire disclosure of each reference in order to draw his or her own conclusions concerning the pertinence of the references to the claimed subject matter of this application. The filing of this Information Disclosure Statement should not be construed to suggest that a patentability search has been made or that the cited references are prior art or are considered to be material to patentability.

Applicant respectfully requests consideration of the foregoing documents during examination of the above-identified patent application. Applicant has enclosed a completed Information Disclosure Statement by Applicant and copies of all publications.

No fee is believed due. If any fee is deemed due, the Commissioner is authorized to charge Deposit Account 04-0258 of Davis Wright Tremaine LLP. A copy of this document is enclosed.

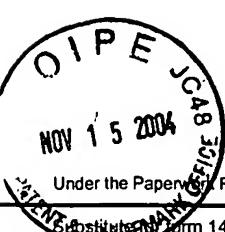
Respectfully submitted,

Davis Wright Tremaine LLP



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PTO/SB/08A (05-03)

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Information Disclosure Statement by Applicant (Use as many sheets as necessary)				Complete if Known	
Sheet 1		of 4		Application Number	10/788,606
				Filing Date	February 27, 2004
				First Named Inventor	Mary E. Brunkow
				Art Unit	1644
				Examiner Name	Patrick Nolan
				Attorney Docket Number	60117-109

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)	MM-DD-YYYY		
AA		6,395,511	05-28-2002	Brunkow et al.	
AB					
AC					
AD					
AE					
AF					
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AN					
AO					
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FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		T <sup>6</sup>
AQ		WO 02/24888 A2	03-28-2002	GENENTECH, INC.	
AR					
AS					
AT					
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformation with MPEP 609. Draw line through citation if not in conformation and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449/PTO				<i>Complete if Known</i>	
				Application Number	10/788,606
				Filing Date	February 27, 2004
				First Named Inventor	Mary E. Brunkow
				Art Unit	1644
				Examiner Name	Patrick Nolan
Sheet	2	of	4	Attorney Docket Number	60117-109

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>2</sup>
	BA	Genbank Accession No. AAB33865, May 27, 1995.		
	BB	Genbank Accession No. CAA88759, January 8, 1997.		
	BC	Genbank Accession No. U25110, February 2, 1996.		
	BD	Genbank Accession No. Z48923, January 8, 1997.		
	BE	BENDAYAN, M., "Possibilities of False Immunocytochemical Results Generated by the Use of Monoclonal Antibodies: The Example of the Anti-proinsulin Antibody," J. Histochem. Cytochem. (1995) 43(9): 881-886.		
	BF	BOST ET AL., "Antibodies Against a Peptide Sequence within the HIV Envelope Protein Crossreacts with Human Interleukin-2," Immunol. Invest. (1988) 17(6&7):577-586.		
	BG	BRUNKOW ET AL., "Bone Dysplasia Sclerosteosis Results from Loss of the SOST Gene Product, a Novel Cysteine Knot-Containing Protein." Am. J. Hum. Genet. (2001) 68:577-589.		
	BH	CAMPBELL ET AL., "Totipotency or Multipotentiality of Cultured Cells: Applications and Progress," Theriogenology (1997) 47:63-72.		
	BI	COLMAN, P., "Effects of Amino Acid Sequence Changes on Antibody-Antigen Interactions," Research in Immunology (1994) 145:33-36.		

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformation with MPEP 609. Draw line through citation if not in conformation and not considered. Include copy of this form with next communication to applicant.

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Substitute for form 1449/PTO				<i>Complete if Known</i>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>				Application Number	10/788.606
				Filing Date	February 27, 2004
				First Named Inventor	Mary E. Brunkow
				Art Unit	1644
				Examiner Name	Patrick Nolan
Sheet	3	of	4	Attorney Docket Number	60117-109

NON PATENT LITERATURE DOCUMENTS					
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	CA	DURHAM ET AL., "Alterations in Insulin-Like Growth Factor (IGF)-Dependent IGF-Binding Protein-4 Proteolysis in Transformed Osteoblastic Cells" Endocrinology (1995) 136(4):1374-1380.			
	CB	HOFFMAN ET AL., "BMP Signaling Pathways in Cartilage and Bone Formation," Critical Review in Eukaryotic Gene Expression (2001) 11(1-3):23-45.			
	CC	LIAN ET AL., "Bone Formation: Osteoblast Lineage Cells, Growth Factors, Matrix Proteins, and the Mineralization Process," Primer on the Metabolic Bone Diseases and Disorders of Mineral Metabolism, 4 <sup>th</sup> Edition (1999) 14-29.			
	CD	MULLINS ET AL., "Perspectives Series: Molecular Medicine in Genetically Engineered Animals; Transgenesis in the Rat and Larger Mammals," J. Clin. Invest. (1996) 97(7):1557-1560			
	CE	NICOLAS ET AL., "An Age-Related Decrease in the Concentration of Insulin-Like Growth Factor Binding Protein-5 in Human Cortical Bone," Calcif. Tissue Int. (1995) 57:206-212			
	CF	OSHIMA ET AL., "TGF- $\beta$ Receptor Type II Deficiency Results in Defects of Yolk Sac Hematopoiesis and Vasculogenesis," Developmental Biology (1996) 179:297-302.			
	CG	PITTENGER ET AL., "Multilineage Potential of Adult Human Mesenchymal Stem Cells," Science (1999) 284:143-147.			
	CH	POCKWINSE ET AL., "Expression of Cell Growth and Bone Specific Genes at Single Cell Resolution During Development of Bone Tissue-Like Organization in Primary Osteoblast Cultures," Journal of Cellular Biochemistry (1992) 49:310-323.			
	CI	SALI ET AL., "Comparative Protein Modelling by Satisfaction of Spatial Restraints," J. Mol. Biol. (1993) 234:779-815.			

Examiner Signature		Date Considered
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Sheet	4	of	4	Attorney Docket Number	60117-109

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	DA	SCHMITT ET AL., "Bone Morphogenetic Proteins: An Update on Basic Biology and Clinical Relevance," Journal of Orthopaedic Research (1999) 17:269-278.		
	DB	SCHLUNEGGER ET AL., "Refined Crystal Structure of Human Transforming Growth Factor $\beta$ 2 at 1.95 Å Resolution," J. Mol. Biol. (1993) 231:445-458.		
	DC	SERRA ET AL., "Expression of a Truncated, Kinase-Defective TGF- $\beta$ Type II Receptor in Mouse Skeletal Tissue Promotes Terminal Chondrocyte Differentiation and Osteoarthritis," J Cell Biol. (1997) 139(2):541-552.		
	DD	SMITH, "TGF $\beta$ Inhibitors, New and Unexpected Requirements in Vertebrate Development," TIG (1999) 15(1):3-5.		
	DE	ZIMMERMAN ET AL., "The Spemann Organizer Signal noggin Binds and Inactivates Bone Morphogenetic Protein 4," Cell (1996) 86:599-606.		
	DG			
	DH			
	DI			

Examiner Signature		Date Considered	
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